China

Victory

Ni70Cr30

3 - 500 kgs \$29-\$35

21-36 working days

10 Tons Per Month

Wooden Case

ISO

Cr30Ni70 Nichrome 70 Alloy Tophet 30 Heating Resistance Round Wire for **Heating Application**

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: 3 KGS
- Price:
- Packaging Details:
- Delivery Time:
- Payment Terms: L/C, T/T, D/A
- Supply Ability:



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BLX 戴之信科技有限公司

Product Specification

•	Highlight:	Cr30Ni70 Nichrome 70 Alloy Round Wire, Tophet 30 Nichrome 70 Alloy Wire, Heating Resistance Nichrome 70 Alloy Wire
•	Lead Time:	15-35 Days After Order Confirm
•	MOQ:	2-5KGS
•	Magnetic Properities:	Nonmagnetic
•	Thermal Conductivity KJ/m.h °C:	60.3
•	Melting Point:	1380°C
•	Max Working Temperature:	1250°C
•	Elongation At Rupture:	≥20%
•	Resistivity:	1.18±0.05
•	Density:	8.10 G/cm3
•	Surface:	Bright/Acid White/Oxidized
•	Material:	Nickel, Chromium



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VK



Our Product Introduction

Cr30Ni70 Nichrome 70 Alloy Tophet 30 Heating Resistance Round Wire for Heating Application

Cr30Ni70 Nichrome wire is a specialized nickel-chromium-based alloy wire that offers exceptional performance in hightemperature and high-resistance applications. Compared to other Nichrome alloy wires, the Cr30Ni70 composition sets it apart with its unique blend of properties.

Cr30Ni70 Nichrome wire has the highest electrical resistivity among Nichrome alloy wires, typically ranging from 1.10 to 1.20 ohm-mm²/m.

This exceptionally high resistivity makes the Cr30Ni70 wire the preferred choice for applications that require extremely high-resistance heating or sensing elements, where a smaller cross-sectional area is needed to achieve the desired resistance.

Outstanding High-Temperature Strength and Oxidation Resistance:

The increased chromium content (30%) in the Cr30Ni70 alloy provides unmatched high-temperature strength and oxidation resistance compared to other Nichrome alloy wires.

This allows the Cr30Ni70 wire to operate reliably at temperatures exceeding 1300°C without significant degradation or failure due to oxidation.

The superior high-temperature performance makes the Cr30Ni70 wire ideal for use in the most demanding heating element applications, such as industrial furnaces, kilns, and specialized high-temperature equipment.

Excellent Corrosion Resistance:

The high nickel content (70%) in the Cr30Ni70 alloy delivers excellent corrosion resistance, surpassing the performance of other Nichrome alloy wires.

This corrosion resistance is crucial in applications where the heating element may be exposed to harsh, corrosive environments, such as in chemical processing equipment or exhaust systems.

Good Mechanical Strength and Ductility:

The Cr30Ni70 Nichrome wire maintains a good balance of mechanical strength and ductility, allowing it to be readily formed, bent, or shaped into various configurations.

This facilitates versatile design and integration options for the wire in different heating element applications.

Applications:

The Cr30Ni70 Nichrome alloy wire is primarily used in the following high-performance applications: Heating elements for industrial furnaces, kilns, and other high-temperature equipment Sensing elements for temperature measurement in critical, high-temperature environments Resistor components in specialized industrial and electronic systems Catalytic converters in automotive exhaust systems exposed to extreme temperatures

In summary, the Cr30Ni70 Nichrome alloy wire stands out from other Nichrome alloy wires due to its unparalleled electrical resistivity, exceptional high-temperature strength and oxidation resistance, excellent corrosion resistance, and good mechanical properties. These unique characteristics make it the preferred choice for the most demanding high-temperature, high-resistance, and corrosive heating and sensing applications.

Performan	ce material	Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35	Cr20Ni30
	Ni	90	Rest	Rest	55.0 61.0	34.0 37.0	30.0 34.0
Composic ión	Cr	10	20.0 23.0	28.0 31.0	15.0 18.0	18.0 21.0	18.0 21.0
	Fe		≤1.0	≤1.0	Rest	Rest	Rest
Max. temperature(°C)		1300	1200	1250	1150	1100	1100
Melting Po	oint °C	1400	1400	1380	1390	1390	1390
Density(g/	cm3)	8.7	8.4	8.1	8.2	7.9	7.9
Resistivity at 20ºC(μΩ@m)		0.76±0.05	1.09±0.0 5	1.18±0.0 5	1.12±0.05	1.00±0.05	1.04±0.05
Elongation at rupture(%)		≥20	≥20	≥20	≥20	≥20	≥20
Specific H	eat J/g.°C		0.44	0.461	0.494	0.5	0.5
Thermal c KJ/m.h°C	onductivity		60.3	45.2	45.2	43.8	43.8
Coefficient expansion 6/(20 1000	t of lines a×10-)°C)		18	17	17	19	19
Micrograp	hic structure		Austenite	Austenite	Austenite	Austenite	Austenite
Magnetic p	properties		Nonmag netic	Nonmagn etic	Nonmagn etic	Weak magnetic	Weak magnetic





